

Appl. No. 10/055,474  
Amdt. Dated June 6, 2005  
Reply to Office Action of March 9, 2005

Docket No. CM02045K  
Customer No.. 24,273

Claims 1-16 remain in the application, and claims 17-23 have been added.

### REMARKS/ARGUMENTS

#### Objection to the specification/claims:

Applicant has amended the Cross Reference section such that it reads as originally filed. Applicant has also added the reference numeral 303 at the appropriate place so that the drawings are in conformance with 37 CFR 1.84(p)(5).

#### Claim Rejections – 35 USC § 102

Claims 1-4, 8-12, and 16 are rejected under 35 U.S.C. §102(b) as being anticipated by Di Santo et al. (US 4,870,677).

Regarding claim 1, Examiner has maintained the rejection of claim 1 based on Di Santo's X/Y conductor grids. Applicant previously pointed out that Di Santo's system is a 'matrix' type display, and contended the matrix did not show "a conductor element configured in the form of a symbol to be displayed." Examiner responded, in maintaining the rejection, by contending "said symbol could constitute something as meager as a single pixel point/dot/square or could be the result of plural pixel operating in unison to visually represent an alphanumeric character, for instance."

Applicant readily concedes Di Santo's matrix, which produces pixels, is capable of displaying various symbols, including a dot, period, or decimal point, for example. However, that is not what Applicant has claimed. Applicant's claim refers to the *shape* of the conductors used for producing the image to be displayed. The conductors used by Di Santo are *not* in the shape of pixels. They are in the form of two grids of lines; one grid having lines in one direction, and another grid, spaced apart from the first grid, having lines in a direction perpendicular to the direction of the lines of the first grid.

Referring to Di Santo '897, cited by Di Santo '677 as the only example of a display, at FIG. 1, element 11 is a cathode line (col. 3, lines 23-27); element 15 is a grid line (col. 3, lines 55-57) and sits upon an insulating member 14 which runs perpendicular to the cathode line 11

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(col. 3, lines 44-55). An anode 16 forms a hollow 20 which is filled with the electrophoretic dispersion 31. "[W]hen a bias potential is applied between the grid and cathode, the electrophoretic particles contained in the dispersion migrate towards the anode...to thus create an electrophoretic image on both the cathode and anode" (col. 4, lines 5-10).

Thus, to generate a pixel, a grid line of each of the first and second grids must be energized, and a pixel *image* is formed at the intersection of those grid lines by the migration of electrophoretic material in the vicinity of the intersection of those energized grid lines. Clearly, the resulting pixel is *not* in the shape of the conductors (perpendicular grid lines) used for producing the pixel image, and vice versa, the grid lines are not in the form of symbols (pixels) to be displayed.

Conversely, Applicant's conductor elements and element sets are in the shape of the symbol desired to be displayed upon energizing the conductor elements. The resulting image displayed to the user is the shape of the conductor element being energized. As Di Santo's display uses conductors in the form of grid lines, and selectively energizes grid lines to form pixel images at the intersection of those energized grid lines, and whereas Applicant claims conductor elements in the form of symbols to be displayed, claim 1 is allowable under 35 U.S.C. §102(b) over Di Santo.

With regard to claim 2, Applicant refers to the argument regarding claim 1 as this claim relates to the conductor elements.

Applicant has amended independent claims 8 and 16 to include the limitation that the display layer of the invention is flexible. Support for this limitation may be found in numerous places throughout the specification, but most directly at page 7, lines 30-31. Di Santo '677 discloses a telephone set (col. 1, lines 7-10) having a display (col. 2, lines 7-10) with a touch or pressure sensitive overlay (col. 3, lines 3-7; 38-41). Di Santo '677 cites, as an example of the display contemplated by Di Santo, US patent 4,655,897, Di Santo '897. Di Santo '897 teaches an electrophoretic display having "a plate of glass" (col. 3, line 34) as a substrate for supporting a layer of indium-tin-oxide, and refers frequently to glass and glass sheets in the design of the display. Neither Di Santo '897 nor Di Santo '677 teach any other formation of the display. Glass is not considered to be a flexible substrate.

Applicant's invention, as amended in independent claims 8, 16, and as claimed in new claim 17 uses a flexible display which allows movement of a switch means, such as a popple

Appl. No. 10/055,474  
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Docket No. CM02045K  
Customer No. 24,273

dome. As Di Santo '677 & '897 teach only inflexible displays, Applicant believes these claims as amended obviate the rejection under 35 U.S.C. §102(b). The argument presented hereinabove with regard to claim 1 also applies to these claims.

With regard to claim 9, Applicant refers to the argument regarding claim 1 as this claim relates to the conductor elements.

Regarding claim 10, Applicant refers to the argument regarding claim 1 as this claim relates to the conductor elements.

Regarding claim 11, Applicant claims that the first and second symbols are not commonly oriented. FIG. 2 and accompanying text describe two symbols that are not commonly oriented. See, for example, the specification at page 6, lines 28-35. It is clear that the orientation refers to the direction in which the characters or symbols will be read by a user. Examiner cites Di Santo '677 at FIGs. 2 and 3 as showing symbols that are not commonly oriented. However, what is shown in those drawings are characters all having the same orientation. Therefore Applicant believes claim 11 is allowable over Di Santo under 35 U.S.C. §102(b).

Regarding claim 12, Applicant claims a plurality of symbols formed by sets of conductor elements, and where the sets are alternatively energized. Examiner cites Di Santo '677 FIGs. 2, 3, and 5. The figures cited in Di Santo show different information being displayed, and the accompanying text describes how random button orders can be generated to allow the user to dial a number in secret. The secret dialing is accomplished by virtue of the fact that the "buttons" are placed in random order on the display. Thus, a person observing another person dialing on the randomly ordered display dial pad would not know the locations of the buttons, and the positions pressed by the person dialing would be meaningless to the observer. FIG. 5 shows the display of directory or phone number information. Applicant has added the limitation that the modes correspond to use of the keypad in different orientations as described at page 4, lines 1-5. Examples of different modes are given by Applicant at page 6, lines 28-35, and include a landscape mode and a portrait mode. That is, the keypad is viewed from one position for a first mode, and from a second position in a second mode. The characters are read in a direction corresponding to the mode. Di Santo teaches no such change of mode.

New independent claim 17 recites an embodiment of the invention similar to claim 1, with the limitation of the display being flexible. As pointed out hereinabove, the display of Di

Appl. No. 10/055,474  
Amdt. Dated June 6, 2005  
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Docket No. CM02045K  
Customer No. 24,273

Santo is rigid, and therefore would not allow depression of the switch means. Furthermore, the argument regarding claim 1 hereinabove applies to this claim as well.

**Claim Rejections – 35 USC § 103**

Claims 5-7 and 13-15 are rejected under 35 U.S.C. §103(a) as being unpatentable over Di Santo '677 in view of Dreher (US 4,551,717).

Claims 5-7, and 13-15 are all dependent on claims reference hereinabove in regard to the rejection under 35 U.S.C. §102(b), and as Applicant believes those independent claims are now allowable, Applicant likewise believes these dependent claims are likewise allowable.

With regard to claim 5, which recites that the switch means is a popple switch, Examiner refers to Dreher, FIG. 2, elements 11 and 12. Applicant points out that these elements are a key cap and a lens, as stated by Dreher at col. 2, lines 26-29. Dreher does not show a popple switch. Dreher does, however, recite that "any type of switch operable by the depression of a key can be used." However, Di Santo teaches away from using a switch means that requires depression to the degree of the key in Dreher or Applicant's popple switch because, as pointed out hereinabove, Di Santo's display uses glass substrate, and would not permit depression to actuate a sprung switch mechanism. Were one to use a sprung switch with the display of Di Santo, the display would break under the force of depression. Therefore Applicant believes one of ordinary skill in the art would not be motivated to combine Di Santo and Dreher.

Regarding claim 6, Examiner compared the lens of Dreher to Applicant's claimed transparent actuating member. However, while Applicant's transparent actuating member allows one to see what is displayed by the display means, it is more than a mere lens. It is the sole structure for actuating the switch. The key cap 11 of Dreher supports the lens 12, and it is the key cap that imparts force to the switch means. Dreher does not teach that the key cap is transparent.

Regarding claim 7, Examiner compared the lens 12 of Dreher to the convex outer surface of Applicant's transparent actuating member. However, claim 7 depends from claim 6, and as pointed out with regard to claim 6, the lens is not the actuating member.

With regard to claims 13-15, these claims correspond to claims 5-7, respectively. The distinctions drawn hereinabove apply to these claims as well.

Appl. No. 10/055,474  
Amdt. Dated June 8, 2005  
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Docket No. CM02045K  
Customer No. 24,273

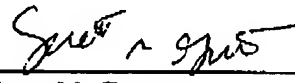
The Applicants believe that the subject application, as amended, is in condition for allowance. Such action is earnestly solicited by the Applicants.

In the event that the Examiner deems the present application non-allowable, it is requested that the Examiner telephone the Applicant's attorney or agent at the number indicated below so that the prosecution of the present case may be advanced by the clarification of any continuing rejection.

Respectfully submitted,

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